

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A network gateway device capable of providing location-based identification to network subscribers, comprising:

a processor that communicates with an access concentrator to receive a plurality of port identifiers assigned by the access concentrator wherein each port identifier is associated with a location-specific connection port that provides connection for one or more hosts, the processor further determines which of the location-specific connection ports are currently accessing the network by associating each of the received port identifiers with a location-specific connection port, and the processor further comprises a querying agent configured to request transmission of location information associated with the plurality of port identifiers from the associated access concentrator in response to a determination that a data packet has been received that fails receipt of data packets that fail to include location information; and

a database associated with the network gateway device that stores the location-specific connection ports for the purpose of identifying one or more hosts associated with the connection port that have been granted network authorization.

2. (Canceled)

3. (Currently Amended) The network gateway device of Claim 1, wherein the processor uses VLAN protocol as a communication link between the processor and the access concentrator.

4. (Canceled)

5. (Currently Amended) The network gateway device of Claim 1, wherein the querying agent uses Simple Network Management Protocol (SNMP) as the communication link between the network gateway device and the access concentrator.

6. (Currently Amended) The network gateway device of Claim 1, wherein the querying agent uses Extensible Markup Language (XML) as the communication link between the network gateway device and the access concentrator.

7. (Currently Amended) A method for implementing location-based identification in a communications network, comprising the steps of:

establishing network connections between a plurality of hosts and a network, wherein each host is connected to the network at a location-specific, connection port;

transmitting data packets from each of the hosts;

identifying the location-specific, connection port of each of the hosts at an access concentrator by assigning one of a plurality of port identifiers that is mapped to a location of the connection port;

communicating the port identifier to a network gateway device by transmitting a port requesting query from the network gateway device in response to a determination that a data packet has been received that fails receipt of data packets that fail to include location information, and receiving a port identifying response at the network gateway device in response to the port requesting response that includes the location information;

storing the port identifier in a database in communication with the network gateway device, the database maps the port identifier to one or more hosts associated with the connection port, and

identifying, at the network gateway device, one or more hosts that have been granted network authorization based upon port identifiers that are currently stored in the database.

8. (Previously Presented) The method of Claim 7, wherein identifying the location-specific, connection port of each of the hosts at an access concentrator further comprises tagging

the data packets being sent from each host with one of a plurality of port identifiers at an access concentrator.

9. (Previously Presented) The method of Claim 8, wherein communicating the port identifier to a network gateway device further comprises transmitting the tagged data packets to a network gateway device.

10. (Previously Presented) The method of Claim 8, wherein tagging the data packets being sent from each host with one of a plurality of port identifiers further comprises tagging the data packets being sent from each host with one of a plurality of port identifiers that corresponds to a media access control (MAC) address.

11. (Previously Presented) The method of Claim 8, wherein tagging the data packets being sent from each host with one of a plurality of port identifiers includes implementing the use of VLAN protocol.

12. (Canceled)

13. (Canceled)

14. (Previously Presented) The method of Claim 7, wherein transmitting a port requesting query from the network gateway device further comprises transmitting a SNMP (Simple Network Management Protocol) query.

15. (Previously Presented) The method of Claim 7, wherein transmitting a port requesting query from the network gateway device further comprises transmitting a XML (Extensible Markup Language) query.

16. (Previously Presented) The method of Claim 7, wherein transmitting a port identifying response further comprises transmitting a port identifier that corresponds with a media access control (MAC) address.

17. (Canceled)

18. (Currently Amended) A method for using location-based identification in a communications network, comprising:

accessing a database in communication with a network gateway device to identify one or more location-specific connection ports within a communications network that are currently mapped to a port identifier;

transmitting a port requesting query from the network gateway device in response to a determination that a data packet has been received that fails receipt of data packets that fail to include location information;

receiving a port identifying response at the network gateway device in response to the port requesting response that includes the location information; and

applying results of the identification to a network system application.

19. (Canceled)

20. (Previously Presented) The method of Claim 18, further comprising executing the network system application at the network gateway device.

21. (Previously Presented) The method of Claim 18, wherein applying results of the identification to a network system application further comprises applying the identified one or more location-specific connection ports to a network billing application that bills subscribers based on location.

22. (Previously Presented) The method of Claim 18, wherein applying results of the identification to a network system application further comprises applying the identified one or more location-specific connection ports to an authorization application that provides authorization to network subscribers based on location.

23. (Previously Presented) The method of Claim 18, wherein applying the results of the identification to a network system application further comprises applying the identified one or more of location-specific connection ports to determine port-specific information that will be communicated to a connection port.

24. (Previously Presented) The network device of Claim 1, wherein the database is configured to store a conditional state for each location-specific connection port.

25. (Previously Presented) The method of Claim 7, further comprising storing a conditional state for each location-specific connection port in the database.

26. (Previously Presented) The method of Claim 18, further comprising storing a conditional state for each location-specific connection port in the database.